



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,865	12/16/2003	William S. DiPoala	BSS0007	5392
832	7590	05/08/2006	EXAMINER	
BAKER & DANIELS LLP 111 E. WAYNE STREET SUITE 800 FORT WAYNE, IN 46802			BOOSALIS, FANI POLYZOS	
			ART UNIT	PAPER NUMBER
			2884	

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,865

Applicant(s)

DIPOALA, WILLIAM S.

Examiner

Faye Boosalis

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-14, 18-20, 27 and 39-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20, 27 and 40-41 is/are allowed.
- 6) ☒ Claim(s) 9-14 and 39 is/are rejected.
- 7) ☒ Claim(s) 4-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Comment on Submissions

1. This communication is responsive to submission of 20 February 2006

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 12-14 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by *Rechsteiner et al (US 6,246,321 B1)*.

Regarding claim 39, Rechsteiner discloses Regarding claim 1, Rechsteiner discloses a motion detector system (1) comprising a first sensor (3) sensitive to light in a first range of wavelengths in at least one detection zone and generating a first output signal representative of the detected level of light in the first range; a second sensor (2) sensitive to light in a second range of wavelengths differing from the first range and generating a second output signal representative of the detected level of light in the second range, and second sensor being positioned proximate the first sensor (See Generally Fig. 1 and col. 3, lines 29-48); and a processor (6), the processor comparing the first output signal to a first threshold value and the second output signal to a second threshold value, the processor programmed to generate an alarm signal based upon the first and second output signals, whereby the alarm signal is generated when first and second conditions are satisfied, the first condition being satisfied when the first output

Art Unit: 2884

signal exceeds the first threshold value, and the second condition being satisfied when the output signal does not exceed the second threshold value (See Abstract and Fig. 1 and col. 4, lines 42-67 and col. 5, lines 1-21).

Regarding claim 12, Rechsteiner discloses the first sensor is a pyro-electric sensor (thermal imaging sensor) (3) and the first range of wavelengths includes wavelengths of approximately 7 to 14 μm (col. 3, lines 35-36) and a second range of wavelengths has an upper limit less than 7 μm and includes wavelengths greater than 400 nm (col. 3, lines 31-36).

Regarding claim 13, Rechsteiner discloses the first sensor is a pyro-electric sensor (thermal imaging sensor) (3) and the first range of wavelengths includes wavelengths of approximately 7 to 14 μm (col. 3, lines 35-36) and a second sensor (2) is sensitive to at least a portion of visible light having wavelengths between 400 nm and 700 nm (col. 3, lines 31-36).

Regarding claim 14, Rechsteiner discloses the first sensor is a pyro-electric sensor (thermal imaging sensor) (3) and the first range of wavelengths includes wavelengths of approximately 7 to 14 μm (col. 3, lines 35-36) and a second sensor (2) is sensitive to near infrared light having a wavelength of approximately 1 μm (col. 3, lines 31-36).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 2884

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Rechsteiner et al* (US 6,246,321 B1) as applied to claim 39 above, and further in view of *Shpater et al* (US 6,215,399 B1).

Regarding claims 9-10, Rechsteiner discloses the motion detection system may comprise simple image-processing algorithms such as filter, illumination controls and the like (col. 3, lines 64-67). Rechsteiner does not specifically disclose of a filtering element disposed between the first sensor and at least one detection zone. Shpater discloses a filter element (i.e. fresnel type lens) disposed between the first sensor and the at least one detection zone wherein the filter inhibits the passage of light having predetermined wavelengths (See Generally Figs. 1-2 and col. 3, lines 35-44). Shpater teaches when a dual PIR motion detector in which the sensors and lenses are vertically aligned, have a simultaneous response, the response from the two detectors is not Simultaneous and an alarm signal is not generated, and thus false alarms are avoided. A "simultaneous" response requires accurate alignment of the two sensors and lenses, which can be provided by mounting the lenses and sensors in the same housing. Preferably, the lenses are formed on the same Fresnel lens sheet to avoid any minor misalignment between the two lenses (col. 2, lines 35-44). Therefore, it would have been obvious to modify the motion detection system disclosed by Rechsteiner, to include a filtering element such as a fresnel lens, as disclosed supra by Shpater, to allow for a more versatile apparatus.

Regarding claim 11, Shpater discloses of a motion detection system comprising a plurality of detection zones (12) (col. 3, lines 39-41).

Allowable Subject Matter

6. Claims 18-20, 27 and 40-41 are allowable.

7. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 40, the prior art does not disclose or fairly suggest a method of detecting motion, the method comprising: when the second condition is not satisfied only when the first output signal exceeds the first threshold value beginning at a first time and the second output signal exceeds the second threshold value beginning at a second time and the first and second times are separated by no more than a predetermined time delay value.

The examiner notes that while it is known in the art of a method of detecting motion, comprising: detecting motion in at least one detection zone by sensing at a first position, infrared light emitted from the at least one detection zone; sensing visible light proximate the first position; generating a motion detection signal when both a) motion is detected in the at least one detection zone by sensing infrared light emitted from the at least one detection zone and b) the detection of motion is based upon a change in the sensed infrared light that does not correlate to a change in the sensed visible light (see for example *Rechsteiner et al -- US 6,246,321 B1--* col. 54-67 and col. 5, lines 1-15), the prior art does not fairly suggest a method if a correlation exists between the first and second signals to determine if the first and second times, of the first and second signals

Art Unit: 2884

exceeding a first and second threshold value, are separated by no more than a predetermined time delay value.

Regarding independent claim 41, the prior art does not disclose or fairly suggest a dual sensor motion detection system comprising: a first sensor capable of detecting light in both an infrared frequency range and a first visible frequency range and a second sensor capable of detecting light in a second visible frequency range.

The examiner notes that while it is known in the art for a motion detector system (1) comprising a first sensor (3) sensitive to light in a first range of wavelengths in at least one detection zone and generating a first output signal representative of the detected level of light in the first range; a second sensor (2) sensitive to light in a second range of wavelengths differing from the first range and generating a second output signal representative of the detected level of light in the second range, and second sensor being positioned proximate the first sensor (see for example *Rechsteiner et al -- US 6,246,321 B1--* Fig. 1 and col. 3, lines 29-48); a processor (6) programmed to generate an alarm signal based upon the first and second output signals wherein the alarm signal is generated when first and second conditions are satisfied, the first condition being satisfied when the first output signal indicates motion has occurred in the at least one detection zone and the second condition being satisfied when the second output signal does not correlate to the first output signal (see for example *Rechsteiner et al -- US 6,246,321 B1--* Abstract and Fig. 1 and col. 4, lines 42-67 and col. 5, lines 1-21) and for a dual sensor motion detection system to comprise a first sensor capable of detecting light in both an infrared frequency range and a visible

frequency range, the prior art does not suggest a second sensor also being capable of detecting visible light in a second visible frequency range (see for example *Rechsteiner et al* -- US 6,246,321 B1-- See Abstract and Fig. 1 and col. 4, lines 42-67 and col. 5, lines 1-21), the prior art does not suggest the second sensor also being capable of detecting visible light in a second visible frequency range.

The remaining claims 18-20 and 27 are allowable based on their dependency.

8. Claims 4-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the prior art, does not disclose or fairly suggest a motion detection system or method wherein the second condition is not satisfied only when the first output signal exceeds the first threshold value beginning at a first time and the second output signal exceeds the second threshold value beginning at a second time and the first and second times are separated by no more than a predetermined time delay value.

Regarding claim 5, the prior art, does not disclose or fairly suggest a motion detection system wherein the second condition is not satisfied only when both first output signal exceeds one of the first threshold values and the second output signal exceeds one of the second threshold values and the first output signal exceeds the one first threshold value beginning at a first time and the second output signal exceeds the one second threshold value beginning at a second time and the first and second times are separated by no more than a predetermined time delay value.

Regarding claim 6, the prior art, does not disclose or fairly suggest a motion detection system wherein one first threshold value and the second threshold value are either both high threshold values or both low threshold values.

Regarding claim 7, the prior art, does not disclose or fairly suggest a motion detection system wherein the threshold comparators are all voltage comparators.

Regarding claim 8, the prior art, does not disclose or fairly suggest a motion detection system wherein the predetermined time delay value is greater than approximately 60 milliseconds.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Boosalis whose telephone number is 571-272-2447. The examiner can normally be reached on Monday thru Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2884

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FB


OTILIA GABOR
PRIMARY EXAMINER